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Department of Energy
Ohio Field Office
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OCT 1 : 1997

DOE-0060-98

Mr. James A. Saric, Remedial Project Manager
U.S. Environmental Protection Agency
Region V-SRF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY STUDY/CONSENT DECREE MONTHLY REPORT - SEPTEMBER 1, 1997, THROUGH SEPTEMBER 30, 1997, AND QUARTERLY REPORT JULY 1, 1997, THROUGH SEPTEMBER 30, 1997, INCLUDING EFFLUENT RADIATION REPORTS, RADON REPORTS, AND REMOVAL ACTION STATUS REPORT

This letter transmits the amended Consent Agreement Monthly Report for the period of September 1, 1997, through September 30, 1997, and the Quarterly Report for July 1, 1997, through September 30, 1997. This report is formatted to reflect the proposal presented in the letter, DOE-0395-96, J. Reising to J. A. Saric and T. Schneider, "Phase VII Removal Actions and Reporting Requirements under the FEMP Legal Agreements," dated January 16, 1996, and agreed to by the U.S. Environmental Protection Agency (U.S. EPA) and Ohio Environmental Protection Agency (OEPA).

If you have any questions, please contact me at (513) 648-3139.

Sincerely,

Johnny W. Reising
Fernald Remedial Action
Project Manager

Enclosure: As Stated

cc w/enc:

N. Hallein, EM-42, CLOV
G. Jablonowski, USEPA-V, 5HRE-8J
R. Beaumier, TPSS/DERR, OEPA-Columbus
F. Barker, Tetra Tech
D. Carr, FDF/52-2
T. Hagen, FDF/65-2
AR Coordinator, FDF/78

cc w/o enc:

F. Bell, ATSDR
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CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY STUDY/CONSENT DECREE MONTHLY REPORT SEPTEMBER 1-30, 1997 AND QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1997 INCLUDING EFFLUENT RADIATION REPORTS, RADON REPORTS, AND REMOVAL ACTION STATUS REPORT

Introduction

This report describes actions at the Fernald Environmental Management Project (FEMP) from July 1 through September 30, 1997. The monthly and quarterly reports have been revised to reflect the proposal presented in the letter, DOE-0395-96, J. Reising to J.A. Saric and T. Schneider, "Phase VII Removal Actions and Reporting Requirements under the FEMP Legal Agreements", dated January 16, 1996, and agreed to by USEPA and OEPA.

CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY STUDY/CONSENT DECREE MONTHLY REPORT SEPTEMBER 1-30, 1997 AND QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1997 INCLUDING EFFLUENT RADIATION REPORTS, RADON REPORTS, AND REMOVAL ACTION STATUS REPORT

OPERABLE UNIT 1 - WASTE PITS REMEDIAL ACTION PROJECT

July 1997

- Enforceable Milestones Completed
  - None
- Major Work Initiated/Completed
  - Sent Alternative Remedial Action Subcontracting Approach (ARASA) Consent Package to DOE-FEMP
  - Completed construction of office annex trailers
  - Continued north railyard construction
  - Continued development of the Transportation Plan, a Remedial Action Work Plan (RAWP) deliverable
  - Continued off-site trestle construction activities
  - Initiated project-specific interactions with Envirocare
  - Initiated construction of rail maintenance building
  - DOE issued Invitation for Bid for the procurement of 135 railcars on July 25, 1997

August 1997

- Enforceable Milestones Completed
  - None
- Major Work Initiated/Completed
  - Continued north railyard installation
  - Continued Site Improvements Project
  - Continued development of the Transportation Plan
  - Continued off-site trestle construction activities
  - Completed construction of rail maintenance building foundation
  - Mobilized contractor for Paddys Run bridge upgrade
  - Completed procurement of pre-fabricated rail maintenance facility
  - Completed draft waste profile documentation for disposal of pit wastes at Envirocare and performed initial review
  - Initiated development of Waste Management Plan

September 1997

- Enforceable Milestones Completed
  - None
- Major Work Initiated/Completed
  - Continued onsite rail infrastructure upgrade
  - Completed Site Improvements Project on September 12, 1997
  - Continued development of the Transportation and Disposal Plan, a Remedial Action Work Plan (RAWP) deliverable

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- Continued Okeana trestle construction activities
- Initiated construction of Paddys Run bridge upgrade
- Awarded contract for erection of locomotive maintenance building
- Performed initial review of draft waste profile documentation for disposal of pit wastes at Envirocare
- Continued development of Waste Management Plan
- Awarded contract for Camp Run and Wynn Road offsite trestle upgrades

October 1997 (Anticipated)

- Enforceable Milestones
  - None

- Major Work to be Initiated/Completed
  - Award ARASA subcontract
  - Incorporate comments and submit waste profile documentation for disposal of pit wastes at Envirocare
  - Continue onsite rail infrastructure upgrade
  - Complete draft of Transportation and Disposal Plan for initial review
  - Complete Okeana trestle upgrade
  - Complete Paddys Run trestle upgrade
  - Initiate construction of Camp Run and Wynn Road trestle upgrades
  - Continue development of Waste Management Plan
  - Mobilize locomotive maintenance building erection subcontractor

OPERABLE UNIT 2 - ON-SITE DISPOSAL FACILITY

Additional OU2 soils-related activities reported under OU5/Soils Characterization and Excavation Project

July 1997

- Enforceable Milestones Completed
  - On-Site Disposal Facility (OSDF)
    - None
  - Soil Characterization & Excavation Project (SCEP)
    - None

- Major Work Initiated/Completed
  - OSDF
    - Closed current North Access Road on July 1, 1997, to support Phase I construction
    - Began construction of Relocated North Access Road; scheduled to open in October 1997
    - Began Cell 1 excavation in preparation for liner installation; continued work on the run-on and run-off diversion ditches
    - Continued work on the subgrade for the Haul Road

- Completed construction of the sediment basin for OSDF Phase I
- Installed Leachate Conveyance System lines in the areas of the Vitrification Pilot Plant Access Road, the Haul Road, and the trailers west of the main FEMP parking lot
- SCEP
  - Continued procurement process for awarding the site preparation contract for Area 2 Phase I (Southern Waste Units); held pre-bid meeting on July 8, 1997, issued Amendments 1-4 to solicitation package between July 14 and July 24, 1997, and received five bids on July 28, 1997
  - Received comments from Agencies on both the Draft Site Preparation Plan and the Certified for Construction (CFC) drawings for Area 2 Phase I; met with OEPA on July 29, 1997, to discuss comment resolution
  - Issued technical report containing updated flood routing modeling for Paddy's Run and revised cross-sections showing flood elevations and groundwater elevations to Agencies on July 31, 1997
  - Initiated field sampling activities on July 28, 1997, under the Project-Specific Plan (PSP) for Area 2 Phase I Site Preparation Areas Sampling, which was given to the Agencies on July 29, 1997; these activities are designed to characterize soil for potential reuse in construction of Area 2 Phase I sedimentation basins, as well as for OSDF waste acceptance criteria attainment

August 1997

- Enforceable Milestones Completed
  - Submitted Final OSDF Groundwater/Leak Detection and Leachate Monitoring Plan to Agencies August 7, 1997

- Major Work Initiated/Completed
  - On-Site Disposal Facility (OSDF)
    - Completed excavation for Cell 1 liner
    - Initiated installation of Cell 1 horizontal perched groundwater monitoring well
    - Initiated installation of Cell 1 compacted clay liner
    - Began excavation of Cell 2
    - Submitted WAC Attainment Plan to Agencies August 21, 1997
    - Submitted Rev. H Impacted Materials Placement Plan No. 1 (oversized materials) to Agencies August 20, 1997
    - Submitted response to comments on Remedial Action Workplan on August 12, 1997 (This response proposed two new OU2 milestones: begin OSDF Phase II Construction 7/15/98; propose project milestone for each outlying fiscal year by August 15 of each preceding fiscal year)
  - Leachate Conveyance System (LCS)
    - Performed pressure testing on installed leachate lines
    - Began work on southern and eastern sections of LCS, including installation of permanent lift station

- Haul Road/Relocated North Entrance Road
  - Continued subgrade work for both roads
  - Installed drainage culverts for Relocated North Entrance Road (gravel base not installed due to adverse weather conditions)

September 1997

- Enforceable Milestones Completed
  - None

- Major Work Initiated/Completed
  - On-Site Disposal Facility (OSDF)
    - Completed installation of Cell 1 horizontal perched groundwater monitoring well
    - Continued installation of Cell 1 compacted clay liner
  - Leachate Conveyance System (LCS)
    - Completed installation and testing on western portion of LCS
    - Installed piping associated with Permanent Lift Station
    - Installed Manholes 1, 2, and 3
  - Haul Road/Relocated North Entrance Road
    - Installed gravel base/geotextile for Relocated North Entrance Road and portions of Haul Road
    - Continued Relocated North Entrance Road paving

October 1997 (Anticipated)

- Enforceable Milestones
  - None

- Major Work to be Initiated/Completed
  - OSDF
    - Complete Cell 1 compacted clay liner installation
    - Initiate installation of synthetic liners and leak detection system
  - LCS
    - Complete installation of leachate lines/manholes
    - Initiate systems operability testing
  - Roads
    - Continue gravel base/geotextile installation on Haul Road; begin paving selected portions
    - Complete paving, shoulder work, and painting of Relocated North Entrance Road; open road to traffic by end of month

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OPERABLE UNIT 3

July 1997

- Enforceable Milestones Completed
  - None

- Major Work Initiated/Completed
  - Safe Shutdown
    - Continued line draining and holdup material removal in Plant 2/3
    - Continued conducting utility disconnects in Plant 6
    - Completed holdup material removal from the Sewage Treatment Plant Incinerator
    - Continued activities in Plant 8
  - D&D
    - Continued activities in Boiler Plant/Water Plant
    - Began evaluation of responses to Request for Proposal for Thorium/Plant 9 Complex D&D Project

August 1997

- Enforceable Milestones Completed
  - Submitted Plant 1 D&D Completion Report to Agencies August 25, 1997

- Major Work Initiated/Completed
  - **Safe Shutdown**
    - Completed holdup removal from:
      Vacuum System in Building 69
      Trane Incinerator in Building 39A
      Drum Washer in Plant 8
  - **D&D**
    - Boiler Plant/Water Plant
      - Continued asbestos abatement inside/outside Boiler Plant
      - Sheared two trailers
      - Continued activities in Water Plant
    - Awarded Thorium/Plant 9 Complex Decontamination and Dismantlement contract to NSC Energy Services, Inc., August 22, 1997.
    - Plant 4
      - Received USEPA approval of Project Completion Report August 12, 1997, and submitted final version to DOE-FEMP August 25, 1997
      - Completed project closeout

September 1997

- Enforceable Milestones Completed
  - None

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- Major Work Initiated/Completed
  - **Safe Shutdown**
    - Completed holdup material removal from selected areas in Plant 2/3, Plant 8, and Building 69
    - Completed energy isolation procedures in Buildings 69 and 32
    - Removed MAWS equipment from Plant 9 for potential reuse
    - Finished initial scope of work to move trash baler from Plant 8 to Building 68
  - **D&D**
    - Plant 1
      - Completed packaging of D&D waste materials for shipment to Nevada Test Site (NTS)
    - Boiler Plant/Water Plant
      - Continued asbestos abatement inside/outside Boiler Plant
      - Sheared two trailers
      - Removed all transite and friable asbestos from Water Plant
    - Issued Notice to Proceed to Thorium/Plant 9 D&D subcontractor September 9, 1997

October 1997 (Anticipated)

- Enforceable Milestones
  - None

- Major Work to be Initiated/Completed
  - **Safe Shutdown**
    - Continue holdup material removal in Plant 2/3, Plant 6 and Plant 8
    - Complete energy isolation procedures on Buildings 78, 81, and Process Trailers
    - Commence utility disconnects on Tank Farm complex
    - Remove salvageable equipment from Building 78
  - **D&D**
    - Continue Boiler Plant/Water Plant activities
      - Asbestos abatement
      - Equipment removal from boilers
      - Demolition of pipe bridge, Building 20B, and railroad scale house
    - Thorium/Plant 9 Complex ---
      - Continue preparing subcontractor work plans
    - Maintenance/Tank Farm Complex
      - Continue development of Implementation Plan

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OPERABLE UNIT 4

July 1997

- Enforceable Milestones Completed
  - The "Agreement Resolving Dispute Concerning Denial of Request for Extension of Time for Certain Operable Unit 4 Milestones" was signed by DOE-OFO on July 14, 1997 and by USEPA Region V on July 22, 1997, establishing enforceable milestones for submittal of the Silo 3 Explanation of Significant Differences (ESD), award of the multi-tech proof-of-principle contract for Silos 1 and 2, and submittal of the draft Silo 1 and 2 FS/PP and ROD Amendment documents; the agreement also specifies implementation of five Supplemental Environmental Projects (SEP) at the FEMP and replaces existing OU4 RD/RA Work Plan milestones with the milestones established in the agreement and subsequent submittals

- Major Work Initiated/Completed
  - Conducted a Silo 3 Stabilization Workshop in Nevada on July 1, 1997; this workshop was part of an effort to provide to the Nevada stakeholders the same information that is being presented to our local stakeholders concerning evaluation of options for treatment and disposal of Silo 3 wastes
  - Attended monthly meeting of Nevada Test Site Citizens Advisory Board on July 2, 1997
  - Assisted in hosting a trip to Brookhaven National Laboratory for members of the Fernald Citizens Advisory Board (FCAB) Waste Management Committee on July 16, 1997; this one-day trip gave the committee an opportunity to receive presentations and ask specific questions concerning the two polymer-based encapsulation technologies being considered for stabilization/solidification of Silo 3 residues
  - Conducted a combined Public Workshop/FCAB Waste Management Committee Meeting on July 29, 1997, to review the detailed analysis of the three potential alternatives to vitrification of Silo 3 waste, in which cement (chemical) stabilization/solidification, polymer (micro) encapsulation, and sulfur/polymer encapsulation were compared using the criteria specified by CERCLA for the Remedial Investigation/Feasibility Study alternatives analysis process; based upon comparison of the three technologies, either cement (chemical) stabilization/solidification or a polymer-based encapsulation process will provide an acceptable alternative to vitrification for treatment of Silo 3 waste prior to offsite disposal

August 1997

- Enforceable Milestones Completed
  - None

- Major Work Initiated/Completed
  - Revised baseline and silos remediation activities schedule in accordance with July 22, 1997, OU4 Dispute Settlement
  - Participated in USEPA-hosted Public Workshop on OU4 Dispute Settlement August 26, 1997
  - Completed design for Silo 3 Small-Scale Waste Retrieval Project; involves retrieval of small amount of Silo 3 waste to support potential analytical and treatability testing requirements

- Continued dismantlement/removal of piping and equipment at Vitrification Pilot Plant (VitPP) as part of efforts to place the facility in a safe and clean configuration for potential reuse and eventual D&D

September 1997

- Enforceable Milestones Completed
  - Submitted Silo 3 Explanation of Significant Differences (ESD) to Agencies September12, 1997
  - Submitted following deliverables to Agencies September 12, 1997:
    - Work Plan for Structural Steel Debris Recycling Project
    - Work Plan for Railroad Track Recycling Project

  (Note: The two Work Plans above are Supplemental Environmental Projects required under the OU4 Dispute Resolution dated July 22, 1997; they are to be managed and implemented by OU3.)

- Major Work Initiated/Completed
  - Received conditional approval of Silo 3 ESD from OEPA
  - Discussed Draft Silo 3 ESD, expected schedule/proposed public involvement process for Draft Silo 3 Request for Proposal (RFP), and Draft Commerce Business Daily announcement for Silos 1 and 2 Multi-Tech Proof-of-Principle Testing at September 16, 1997, meeting of the Fernald Citizens Advisory Board (FCAB) Waste Management Committee
  - Completed core sampling of Silo 4; performed initial compressive strength tests on wall cores
  - Initiated design for Silos 1, 2, and 3 core sampling
  - Continued dismantlement/removal of piping and equipment at Vitrification Pilot Plant (VitPP) as part of efforts to place the facility in a safe and clean configuration for potential reuse and eventual D&D
  - Issued CBD announcement for Silos 1 and 2 Multi-Tech Proof-of-Principle Testing September 25, 1997
  - Initiated preliminary engineering for radon control system

October 1997 (Anticipated)

- Enforceable Milestones
  - None

- Major Work to be Initiated/Completed
  - Prepare response to comments from Agencies on Draft Silo 3 ESD; prepare Draft Final version, contingent upon receipt of USEPA comments
  - Continue dismantlement/removal activities at VitPP
  - Perform compressive strength tests on dome cores; analyze results

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OPERABLE UNIT 5

July 1997

- Enforceable Milestones Completed
  - Aquifer Restoration Project (ARP)/Advanced Waste Water Treatment (AWWT)
    - Transmitted the Operations and Maintenance Master Plan (OMMP) for the Aquifer and Wastewater Treatment Project to the Agencies on June 30, 1997, meeting the actual milestone date of July 1, 1997; note that the South Plume Performance Monitoring and Maintenance Plan was revised and incorporated into the OMMP as Appendix A
    - The Integrated Environmental Monitoring Plan (IEMP) was approved by USEPA on July 10, 1997
  - Soils Characterization and Excavation Project (SCEP)
    - Submitted the Certification Report for Area 1 Phase I to the Agencies on June 30, 1997
    - Submitted the following documents to the Agencies on July 11, 1997, meeting the actual milestone date of July 14, 1997
      - Draft Sitewide Excavation Plan (SEP)
      - Draft RTRAK (Radiological Tracking System) Applicability Study
      - Revised Draft Comparability of In-Situ Gamma Spectroscopy and Laboratory Data Report (also known as the HPGe Comparability Study or the In-Situ Characterization Comparability Study)

  NOTE: Also refer to OU2 July enforceable milestone entries presented earlier in this report because certain OU2 work is being performed within OU5

- Major Work Initiated/Completed
  - ARP/AWWT
    - Transmitted the following Certified for Construction packages to the Agencies on July 8, 1997:
      - South Field Extraction System Project
      - Injection Demonstration Project
      - South Plume Optimization Project
    - Received bids for the three projects listed above on July 24, 1997
    - Continued construction on AWWT regeneration project, which is approximately 75% complete; target operational date has been revised to November 1997
    - Continued construction on the Sewage Treatment Plant Relocation, which is approximately 50% complete
    - Issued Request for Proposal for relocation of the existing Biodenitrification Effluent Treatment Facility for reuse as the new Sewage Treatment Plant
  - SCEP
    - Initiated pre-design work for development of the IRDP for Area 3 (the portion of the Former Production Area north of 2nd Street)
    - Initiated development of a Project-Specific Plan (PSP) for the northeast corner of Area 3 to delineate uranium (WAC attainment) and lead (Suspected Toxicity Characteristic

Area)
- Continued development of several Area 1 Phase II (remaining portion of the west field) PSPs, primarily concerned with WAC Attainment Delineations and Area-Specific Constituents of Concern Characterizations associated with the Sewage Treatment Plant Area
- Completed Phase II archaeological investigations of two sites in the South Field, in support of planning efforts for Area 2 Phase II and ARP/AWWT; at the present time, no further archeological study is recommended at either site

August 1997

- Enforceable Milestones Completed
  - **Aquifer Restoration/Wastewater Project (ARWWP)**
    - Transmitted Final Integrated Environmental Monitoring Plan (IEMP) to Agencies on August 7, 1997; Final OSDF Groundwater/Leak Detection and Leachate Monitoring Plan was included as part of transmittal; National Emissions Standards for Hazardous Air Pollutants (NESHAP) approval was granted by the Air and Radiation Section of USEPA Region V on August 1, 1997
  - **Soils Characterization and Excavation Project (SCEP)**
    - Received USEPA approval on August 13, 1997, of DOE-FEMP's June 27, 1997, request for extension of two milestones:
      - Prefinal Area 2 Phase I Integrated Remedial Design Package (IRDP) - extended from July 14, 1997 to October 20, 1997
      - Area 2 Phase I Final Design/Certified for Construction excavation package design drawings - extended from August 11, 1997 to February 16, 1998

- Major Work Initiated/Completed
  - **ARWWP**
    - Evaluated bids for combined South Field Extraction System, Injection Demonstration Project, and South Plume Optimization Projects, and awarded contract to DeBra on August 13, 1997
    - Issued Notice to Proceed to DeBra for above combined projects on August 25, 1997
    - Continued construction on Advanced Waste Water Treatment (AWWT) Ion Exchange Regeneration System; construction is 90% complete and will be followed by training and system operability testing activities
  - **SCEP**
    - Awarded contract for Area 2 Phase I (*OU2 Southern Waste Units & OU5 Soil*) on August 6, 1997
    - Met with USEPA on August 5 - 6, 1997, to resolve comments on Draft Area 2 Phase I Site Preparation Plan and Area 2 Phase I Certified for Construction Site Preparation Package Drawings
    - Participated in conference call with Agencies on August 13, 1997, to discuss Area 2 Phase I Site Preparation Project Specific Plan (PSP), and Technetium-99 and Thorium-232 issues
    - Performed selected Area 2 Phase I Site Preparation Areas sampling activities

- Performed Area 1 Phase I (*Northern Half of East Field & Areas North of Production Area*) field sampling for East Soil Stockpile WAC Attainment
- Performed Area 1 Phase II (*Southern Half of East Field*) Trap Range Lead field sampling; also began Area 1 Phase II Real-Time Above WAC sampling
- Continued development of IRDPs for Area 2 Phase I, Area 1 Phase II, and Area 3 (*Portion of former Production Area North of 2nd Street*)

September 1997

- Enforceable Milestones Completed
  - **Aquifer Restoration/Wastewater Project (ARWWP)**
    - Submitted Re-Injection Demonstration Test Plan to Agencies on August 29, 1997, meeting actual milestone date of September 1, 1997
    - Submitted response to comments and Draft Final version of Operations and Maintenance Master Plan to Agencies on September 19, 1997
    - Submitted NPDES Permit Renewal Application to OEPA on September 22, 1997, meeting actual milestone date of October 2, 1997
    - Submitted Design, Monitoring, and Evaluation Program Plan (DMEPP) Semi-Annual Report to Agencies on September 23, 1997, meeting actual milestone date of October 1, 1997
  - **Soils Characterization and Excavation Project (SCEP)**
    - None

- Major Work Initiated/Completed
  - **ARWWP**
    - Awarded contract for relocation of Sewage Treatment Plant (STP) to Orbit Movers and Erectors on September 3, 1997
    - Mobilized contractor for work on combined South Field Extraction System, Injection Demonstration, and South Plume Optimization Projects September 22, 1997
    - Continued construction on Advanced Waste Water Treatment (AWWT) Ion Exchange Regeneration System; construction is nearly complete and system operability testing has been initiated
    - Continued construction activities on AWWT expansion; all ion exchange and multimedia filters have arrived on site and are being installed
  - **SCEP**
    - Discovered Paddy's Run embankment erosion west of K-65 Silos---verbally notified Agencies on September 9, 1997 and in written form September 26, 1997; roped off/posted area on September 10, 1997, and initiated protective/mitigative actions
    - Received Area 2 Phase I *(Southern Waste Units)* contractor's Safe Work Plan submittal and initiated Site Preparation Package work on September 15, 1997, with installation of perimeter fencing
    - Conducted design-based sampling activities in Area 1 Phase II *(Southern Half of East Field)* and Area 2 Phase I
    - Engaged in preparation/discussion of response to comments documents concerning several SCEP documents presently in review by the Agencies, including:

  - Area 1 Phase I (*Northern Half of East Field & Areas North of Production Area*) Certification Report, submitted June 1997
  - Waste Acceptance Criteria Attainment Completion Reports, Area 1 Phase I, Eastern Portion and Western Portion, both submitted June 1997
  - Area 2 Phase I Site Preparation Package, submitted June 1997
  - Draft Sitewide Excavation Plan, submitted July 1997
  - RTRAK Applicability Study Report, submitted July 1997
  - Comparability of In-Situ Gamma Spectroscopy (HPGe) and Laboratory Data, submitted July 1997
- Met with the Agencies on September 9, 1997, and September 17, 1997, to discuss various WAC attainment and other field implementation issues
- Continued development of Integrated Remedial Design Plans (IRDPs) for Area 2 Phase I, Area 1 Phase II, and Area 3 (*Portion of former Production Area North of 2nd Street*)

October 1997 (Anticipated)

- Enforceable Milestones
  - **ARWWP**
    - Transmit NPDES Permit Renewal Application to OEPA by October 2, 1997; this milestone was met on September 22, 1997
    - Transmit DMEPP Semi-Annual Report described in September milestone section above to Agencies by October 1, 1997; this milestone was met on September 23, 1997
  - **SCEP**
    - Submit Prefinal Area 2 Phase I IRDP to Agencies by October 20, 1997

- Major Work to be Initiated/Completed
  - **ARWWP**
    - Begin construction activities on combined South Field Extraction System, Injection Demonstration, and South Plume Optimization Projects
    - Mobilize contractor for STP Relocation
    - Issue Task Orders against existing well construction contract for:
      - Nine observation/monitoring wells in support of Re-Injection Demonstration Project
      - Two extraction wells for South Plume Optimization Project
  - **SCEP**
    - Remove downed trees and metal debris from channel of Paddys Run; continue evaluating long-term measures to address erosion and instability concerns
    - Continue field implementation of Area 2 Phase I Site Prep package
    - Perform/complete selected sampling activities in Area 2 Phase I, Area 1 Phase II, Area 3, and Area 8 *(OU5 Soil in Area West of Paddys Run)*
    - Continue development of IRDPs for Area 1 Phase II and Area 3
    - Continue development of Project Specific Plans (PSPs) for Area 3

WASTE MANAGEMENT

CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY STUDY/CONSENT DECREE MONTHLY REPORT SEPTEMBER 1-30, 1997 AND QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1997 INCLUDING EFFLUENT RADIATION REPORTS, RADON REPORTS, AND REMOVAL ACTION STATUS REPORT

July 1997

- Enforceable Milestones Completed
  - None

- Major Work Initiated/Completed
  - Low Level Waste
    - Shipped 1,825.00 m^3 low level waste to Nevada Test Site (NTS)
  - Mixed Waste Treatment Projects
    - Liquid Mixed Waste --- Sampling performed by Lockheed Martin for acceptance of Batch #7 at the TSCA Incinerator; shipment of this waste is scheduled to be performed prior to the end of September 1997
    - Chemical Treatment Projects
      - Treated 1.00 m^3 mixed waste in the Neutralization/Precipitation/Deactivation/ Stabilization (NPDS) Project
      - RCI Solvent Extraction Project --- Completed Construction Acceptance Testing and Systems Operability Testing
    - Thorium Stabilization Project --- Received proposals from four potential contractors in June for cement stabilization of thorium waste which is identified as mixed; these proposals were evaluated during the month of July

August 1997

- Enforceable Milestones Completed
  - None

- Major Work Initiated/Completed
  - Low Level Waste
    - Shipped 116,169 ft^3 low level waste to Nevada Test Site (NTS), bringing FY97 total to 472,721 ft^3 of 612,000 ft^3 FY97 goal
    - DOE-NV auditors visited FEMP the week of August 18, 1997, and closed Corrective Action Requests made during their June 1997 surveillance
  - Mixed Waste Treatment Projects
    - Mixed Waste Shipping --- Preparing 308 drums of selected mixed waste for disposal at Envirocare; received analytical results, prepared and submitted waste profile to Envirocare for review
    - Chemical Treatment Projects
      - Treated 1.6 m^3 mixed waste in the Neutralization/Precipitation/Deactivation/ Stabilization (NPDS) Project
      - Organic Extraction Project (RCI/Terra-Kleen) --- Standard Startup Review was conducted week of August 18, 1997
    - Thorium Legacy Waste Project --- Awarded contract to OHM August 8, 1997
  - Other Waste Management
    - Shipped last of Thorium Overpack Containers in Thorium Overpacking Project to NTS
    - Issued Final Plan - Decision Methodology for Fernald Material Disposition Alternatives

CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY STUDY/CONSENT DECREE MONTHLY REPORT SEPTEMBER 1-30, 1997 AND QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1997 INCLUDING EFFLUENT RADIATION REPORTS, RADON REPORTS, AND REMOVAL ACTION STATUS REPORT

September 1997

- Enforceable Milestones Completed
  - None

- Major Work Initiated/Completed
  - Low Level Waste
    - Shipped 147,400 cf low level waste to NTS; total of 612,035 cf shipped in FY97, exceeding FY97 shipping goal of 612,000 cf
  - Mixed Waste Treatment Projects
    - Liquid Mixed Waste --- Completed bulking of Batch #8 (newly generated/recharacterized low level waste)
    - Chemical Treatment Projects
      - Neutralization/Precipitation/Deactivation/ Stabilization (NPDS) Project --- Recharacterized four drums of insulation material out of contaminated copper wire from mixed to low level waste
      - Organic Extraction Project (RCI/Terra-Kleen) --- Began demonstration phase; completed solvent washing of soils and sludges
    - Hazardous Waste/Recycling Project --- Shipped three drums graphic waste to various Safety Kleen Corporation locations for recycling or disposal
    - Thorium Legacy Waste Stabilization Project --- Began waste characterization of thorium legacy inventory

October 1997 (Anticipated)

- Enforceable Milestones
  - None

- Major Work to be Initiated/Completed
  - Low Level Waste
    - Shipping goal of approximately 30,000 cf
  - Mixed Waste Treatment Projects
    - Mixed Waste Shipping --- Preparing 308 drums of laundry sump cake for disposal at Envirocare; drums to be moved from Building 79 to Plant 6 for addition of adsorbent material in preparation for shipment
    - Liquid Mixed Waste Project --- Ship Batch #7 (19,000+ gallons of mixed waste) to TSCA Incinerator; begin bulking of Batch #9 (newly generated waste streams)
    - Chemical Treatment Projects
      - Organic Extraction Project (RCI/Terra-Kleen) --- Complete demonstration phase and begin scale-up for treatment of ~250 m^3 tri-mixed waste
      - NPDS Project --- Awaiting completion of Organic Extraction Project demonstration phase to process seven additional drums, which will be moved for processing

CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY STUDY/CONSENT DECREE MONTHLY REPORT SEPTEMBER 1-30, 1997 AND QUARTERLY REPORT JULY 1 THROUGH SEPTEMBER 30, 1997 INCLUDING EFFLUENT RADIATION REPORTS, RADON REPORTS, AND REMOVAL ACTION STATUS REPORT

- Hazardous Waste/Recycling Project --- Ship Lab Pack from Analytical Lab Services; make second shipment of chemicals from Graphics Department
- Thorium Legacy Waste Stabilization Project --- Move thorium legacy waste from Building 81 to Building 64/65

THORIUM OVERPACKING PROJECT UPDATE (TOP)

All figures cumulative as of August 1, 1997

- Overpacked 5,577 drums
- Filled 971 Thorium Overpack Containers (TOCs)
- Shipped 961 TOCs

Overpacking of the thorium containers associated with this project was completed on May 21, 1997, 10 months ahead of schedule, significantly under budget, and at a worker exposure rate less than half of that originally estimated. TOCs shipped is 99.38% complete, leaving 10 TOCs to be shipped to the Nevada Test Site.

ATTACHMENT A

EFFLUENT RADIATION REPORTS

EFFLUENT RADIATION REPORT

JULY 1997

PARSHALL FLUME (Effluent to Great Miami River 1IO00004001)

	Flow (gallons)	Total Alpha (pCi/l)	Total Beta (pCi/l)	Total U (ug/l)	Total U (kg)	Calculated Total U-238 (pCi/l) (1)
Total	63,597,000	N/A	N/A	N/A	3.01	N/A
Avg (2)	2,052,000	8	18	13	0.10	4
Max	2,610,000	17	29	28	0.22	9
Min	1,401,000	6	14	9	0.06	3

STORMWATER RETENTION BASIN BYPASSES

	Flow (gallons)	Total Alpha (pCi/l)	Total Beta (pCi/l)	Total U (ug/l)	Total U (kg)	Calculated Total U-238 (pCi/l) (1)
Total	0	N/A	N/A	N/A		
Avg (2)						
Max						
Min						

STORMWATER RETENTION BASIN OVERFLOWS

	Flow (gallons)	Total Alpha (pCi/l)	Total Beta (pCi/l)	Total U (ug/l)	Total U (kg)	Calculated Total U-238 (pCi/l) (1)
Total	0	N/A	N/A	N/A		
Avg (2)						
Max						
Min						

(1) The activity of this discharge has been and will continue to be reported as Uranium-238 (pCi/l) in accordance with the Ohio EPA format for reporting uranium. Since this does not account for the activity of the other uranium isotopes in the effluent, the total uranium data is also presented. The calculated Total U-238 is based on a conversion factor of 337.84 pCi U-238/mg Total U applied to the measured value of total uranium.

(2) Average values presented are flow-weighted.

(3) Analytical results not yet available.

SOUTH PLUME WELLFIELD

	Flow (gallons)	Total U (ug/l)	Total U (kg)
Total	62,323,000	N/A	3.92
Avg (2)	2,010,000	16.6	0.13
Max	2,079,000	20.7	0.16
Min	1,929,000	10.1	0.08

STORMWATER RUNOFF TO PADDY'S RUN

Precipitation	0.94 in
Total U	2.67 kg

SOUTH FIELD LEACHATE SYSTEM

Quarterly Sampling Required
No Sample Collected This Month

East Sump

Solids	mg/l
Total U	ug/l

West Sump

Solids	mg/l
Total U	ug/l

Total Gallons

EFFLUENT RADIATION REPORT

AUGUST 1997

PARSHALL FLUME (Effluent to Great Miami River 1IO00004001)

	Flow (gallons)	Total Alpha (pCi/l)	Total Beta (pCi/l)	Total U (ug/l)	Total U (kg)	Calculated Total U-238 (pCi/l) (1)
Total	69,402,000	N/A	N/A	N/A	9.24	N/A
Avg (2)	2,239,000	27	26	35	0.30	9
Max	4,020,000	140	94	168	2.51	57
Min	1,653,000	6	14	10	0.07	3

STORMWATER RETENTION BASIN BYPASSES

	Flow (gallons)	Total Alpha (pCi/l)	Total Beta (pCi/l)	Total U (ug/l)	Total U (kg)	Calculated Total U-238 (pCi/l) (1)
Total	4,401,000	N/A	N/A	N/A	4.72	N/A
Avg (2)	1,467,000	***	***	283	1.57	9
Max	1,870,000	***	***	318	2.14	107
Min	1,055,000	***	***	235	1.27	79

STORMWATER RETENTION BASIN OVERFLOWS

	Flow (gallons)	Total Alpha (pCi/l)	Total Beta (pCi/l)	Total U (ug/l)	Total U (kg)	Calculated Total U-238 (pCi/l) (1)
Total	0	N/A	N/A	N/A		
Avg (2)						
Max						
Min						

(1) The activity of this discharge has been and will continue to be reported as Uranium-238 (pCi/l) in accordance with the Ohio EPA format for reporting uranium. Since this does not account for the activity of the other uranium isotopes in the effluent, the total uranium data is also presented. The calculated Total U-238 is based on a conversion factor of 337.84 pCi U-238/mg Total U applied to the measured value of total uranium.

(2) Average values presented are flow-weighted.

(3) Analytical results not yet available.

*** No sample collected.

SOUTH PLUME WELLFIELD

	Flow (gallons)	Total U (ug/l)	Total U (kg)
Total	62,260,000	N/A	3.81
Avg (2)	2,008,000	16.2	0.12
Max	2,283,000	21.1	0.16
Min	1,807,000	10.0	0.08

STORMWATER RUNOFF TO PADDY'S RUN

Precipitation	4.84 in
Total U	13.75 kg

SOUTH FIELD LEACHATE SYSTEM

Quarterly Sampling Required
No Sample Collected This Month

East Sump

Solids	mg/l
Total U	ug/l

West Sump

Solids	mg/l
Total U	ug/l

Total Gallons

EFFLUENT RADIATION REPORT

SEPTEMBER 1997

PARSHALL FLUME Effluent to Great Miami River 1IO00004001)

	Flow (gallons)	Total Alpha (pCi/l) (3)	Total Beta (pCi/l) (3)	Total U (ug/l)	Total U (kg)	Calculated Total U-238 (pCi/l) (1)
Total	62,409,000	N/A	N/A	N/A	2.45	N/A
Avg (2)	2,080,000	6	12	10.4	0.08	3
Max	2,457,000	19	30	14.8	0.11	5
Min	1,820,000	6	14	6.6	0.05	2

STORMWATER RETENTION BASIN BYPASSES

	Flow (gallons)	Total Alpha (pCi/l)	Total Beta (pCi/l)	Total U (ug/l)	Total U (kg)	Calculated Total U-238 (pCi/l) (1)
Total	0	N/A	N/A	N/A		
Avg (2)						
Max						
Min						

STORMWATER RETENTION BASIN OVERFLOWS

	Flow (gallons)	Total Alpha (pCi/l)	Total Beta (pCi/l)	Total U (ug/l)	Total U (kg)	Calculated Total U-238 (pCi/l) (1)
Total	0	N/A	N/A	N/A		
Avg (2)						
Max						
Min						

(1) The activity of this discharge has been and will continue to be reported as Uranium-238 (pCi/l) in accordance with the Ohio EPA format for reporting uranium. Since this does not account for the activity of the other uranium isotopes in the effluent, the total uranium data is also presented. The calculated Total U-238 is based on a conversion factor of 337.84 pCi U-238/mg Total U applied to the measured value of total uranium.

(2) Average values presented are flow-weighted.

(3) Complete analytical results not yet available.

SOUTH PLUME WELLFIELD

	Flow (gallons)	Total U (ug/l)	Total U (kg)
	57,592,000	N/A	3.75
Avg (2)	1,920,000	17.2	0.12
Max	2,239,000	28.2	0.21
Min	1,228,000	10.4	0.06

STORMWATER RUNOFF TO PADDY'S RUN

Precipitation	0.80 in
Total U	2.27 kg

SOUTH FIELD LEACHATE SYSTEM

Quarterly Sampling Required

Sample Collected 09/05/97

East Sump

Solids	10 mg/l
Total U	22.8 ug/l

West Sump

No Sample Collected Due To Construction.

Total Gallons Totalizer Not Working.

ATTACHMENT B

RADON REPORTS

CONSOLIDATED CONSENT AGREEMENT / FEDERAL FACILITY COMPLIANCE AGREEMENT/
FEDERAL FACILITY AGREEMENT MONTHLY PROGRESS REPORT

MONTH: JULY
YEAR: 1997

FACILITY: Fernald Environmental Management Project
U.S. Department of Energy
7400 Willey Road, P.O. Box 538704
Cincinnati, Ohio 45253 Hamilton

K-65 SILO REPORT
RADON CONCENTRATIONS

Summary of Continuous Monitoring Results — Report Date: 10/08/97

Daily Statistics	SILO 1				SILO 2			
	Average	Maximum	Minimum	Std. Dev.	Average	Maximum	Minimum	Std. Dev.
07/01/97	8.92E+06	9.36E+06	5.26E+04	6.14E+05	8.23E+06	8.61E+06	-1.73E+04	5.66E+05
07/02/97	9.09E+06	9.47E+06	8.36E+06	2.84E+05	8.32E+06	8.74E+06	7.27E+06	2.95E+05
07/03/97	9.19E+06	9.56E+06	4.77E+06	3.55E+05	8.27E+06	8.69E+06	5.49E+06	3.16E+05
07/04/97	9.29E+06	9.55E+06	8.73E+06	1.67E+05	8.35E+06	8.69E+06	7.68E+06	1.60E+05
07/05/97	9.16E+06	9.68E+06	8.56E+06	3.13E+05	8.42E+06	8.88E+06	7.90E+06	2.24E+05
07/06/97	9.03E+06	9.61E+06	8.34E+06	3.96E+05	8.41E+06	8.96E+06	7.73E+06	3.17E+05
07/07/97	8.90E+06	9.46E+06	8.09E+06	3.86E+05	8.37E+06	8.88E+06	7.67E+06	3.40E+05
07/08/97	8.95E+06	9.32E+06	7.40E+06	2.98E+05	8.39E+06	8.81E+06	6.78E+06	3.48E+05
07/09/97	9.19E+06	9.48E+06	8.88E+06	1.45E+05	8.33E+06	8.59E+06	7.80E+06	1.49E+05
07/10/97	9.09E+06	9.65E+06	8.37E+06	3.39E+05	8.30E+06	8.81E+06	7.41E+06	3.31E+05
07/11/97	8.87E+06	9.47E+06	8.15E+06	4.12E+05	8.29E+06	8.85E+06	7.63E+06	3.49E+05
07/12/97	8.86E+06	9.48E+06	7.95E+06	4.63E+05	8.29E+06	8.81E+06	7.50E+06	3.73E+05
07/13/97	8.91E+06	9.47E+06	8.07E+06	4.25E+05	8.32E+06	8.81E+06	7.52E+06	3.69E+05
07/14/97	9.10E+06	9.49E+06	8.37E+06	3.13E+05	8.43E+06	8.80E+06	7.57E+06	2.62E+05
07/15/97	9.03E+06	9.56E+06	3.17E+06	5.48E+05	8.36E+06	8.76E+06	4.46E+06	3.69E+05
07/16/97	8.98E+06	9.75E+06	8.12E+06	4.56E+05	8.22E+06	8.75E+06	7.56E+06	3.38E+05
07/17/97	9.03E+06	9.58E+06	8.19E+06	3.82E+05	8.25E+06	8.76E+06	7.53E+06	3.32E+05
07/18/97	9.09E+06	9.62E+06	5.36E+04	8.31E+05	8.25E+06	8.72E+06	-1.15E+05	7.46E+05
07/19/97	9.29E+06	9.69E+06	8.62E+06	2.63E+05	8.32E+06	8.66E+06	7.72E+06	2.09E+05
07/20/97	9.25E+06	9.86E+06	8.40E+06	4.05E+05	8.28E+06	8.78E+06	7.58E+06	2.84E+05
07/21/97	9.20E+06	9.84E+06	-1.11E+04	9.96E+05	8.32E+06	8.87E+06	-1.15E+05	7.69E+05
07/22/97	9.34E+06	9.65E+06	1.14E+05	6.16E+05	8.47E+06	8.72E+06	6.82E+06	2.36E+05
07/23/97	9.46E+06	9.73E+06	8.87E+06	2.21E+05	8.42E+06	8.66E+06	7.89E+06	1.75E+05
07/24/97	9.37E+06	9.83E+06	6.31E+06	3.86E+05	8.36E+06	8.72E+06	5.51E+06	2.98E+05
07/25/97	9.23E+06	9.83E+06	3.32E+06	4.29E+05	8.30E+06	8.70E+06	7.64E+06	3.13E+05
07/26/97	9.28E+06	9.85E+06	8.78E+06	3.82E+05	8.31E+06	8.78E+06	7.77E+06	3.39E+05
07/27/97	9.24E+06	9.73E+06	7.26E+06	4.17E+05	8.23E+06	8.72E+06	6.50E+06	3.79E+05
07/28/97	9.31E+06	9.74E+06	8.56E+06	3.38E+05	8.36E+06	8.72E+06	7.71E+06	2.91E+05
07/29/97	9.37E+06	9.82E+06	1.14E+05	8.11E+05	8.11E+06	8.66E+06	4.14E+05	6.00E+05
07/30/97	9.55E+06	9.99E+06	1.14E+05	6.42E+05	8.11E+06	8.70E+06	-7.82E+02	6.18E+05
07/31/97	9.34E+06	1.00E+07	8.61E+06	4.07E+05	8.31E+06	8.86E+06	7.74E+06	3.40E+05

Headspace Grab Sample Results

Date:	SILO 1	SILO 2
07/01/97	1.20E+07	8.12E+06
07/03/97	1.23E+07	8.14E+06
07/08/97	1.09E+07	8.62E+06
07/10/97	1.14E+07	8.17E+06
07/15/97	1.19E+07	7.95E+06
07/18/97	1.12E+07	8.23E+06
07/21/97	1.10E+07	9.03E+06
07/24/97	1.17E+07	8.49E+06
07/29/97	1.24E+07	7.58E+06
07/31/97	1.14E+07	8.15E+06

NOTES: Negative values may occur when input values from the DAQ system are low, due to regression parameters used in determining concentrations. The low value phenomenon is caused by problems associated with the DAQ system (i.e. power surges, equipment failure, grab sampling, etc.).

STANDARD LEGEND:

1. All values reported in pCi/L.
2. Data reported to three significant digits to remain consistent with the calibration data.
3. Shaded Cells indicate partial/complete data loss due to equipment malfunction.

CONSOLIDATED CONSENT AGREEMENT / FEDERAL FACILITY COMPLIANCE AGREEMENT/ FEDERAL FACILITY AGREEMENT MONTHLY PROGRESS REPORT

MONTH: JULY
YEAR: 1997

FACILITY: Fernald Environmental Management Project
U.S. Department of Energy
7400 Willey Road, P.O. Box 538704
Cincinnati, Ohio 45253 Hamilton

SELECTED ENVIRONMENTAL MONITORING RADON CONCENTRATIONS REPORT

Report Generated:
10/08/97

Daily Averages	AMS 5	AMS 6	PILOT PLANT WAREHOUSE	AMS 11 Background 1	BKGD 2 Miamitown	K65.NW	K65.SW	K65.NE	K65.SE
	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)
07/01/97	0.8	0.8	0.4	N/A (b)	0.8	1.8	1.7	4.8	N/A (b)
07/02/97	1.1	0.9	0.8	0.5	0.8	1.8	2.0	7.7	1.3 (b)
07/03/97	0.7	0.5	0.5	0.5	0.8	0.9	0.9	3.8	3.0
07/04/97	0.7	0.5	0.4	0.4	0.8	1.3	0.8	3.0	4.3
07/05/97	0.9	0.8	0.5	0.5	0.8	1.1	1.3	2.1	4.0
07/06/97	0.7	0.9	0.8	0.8	0.8	1.7	2.4	8.8	8.2
07/07/97	1.2	0.9	0.9	0.9	0.8	1.3	1.9	7.8	7.9
07/08/97	1.1	1.0	0.9	1.3 (a)	0.8	1.8	2.2	10.3	7.8
07/09/97	0.8	0.8	0.5	N/A (a)	0.7	1.5	2.0	2.4	2.3
07/10/97	1.4	0.7	0.5	N/A (a)	0.7	1.2	2.4	1.1	1.8
07/11/97	0.9	1.0	0.7	N/A (a)	0.8	1.9	2.8	6.8	12.1
07/12/97	1.5	1.1	0.9	N/A (a)	1.0	1.7	2.4	9.3	17.5
07/13/97	1.8	1.2	1.0	N/A (a)	1.0	3.5	3.8	12.2	16.8
07/14/97	2.8 (b)	1.1	0.9	N/A (a,b)	0.9	2.8	3.1	8.3	9.8
07/15/97	N/A (b)	0.7	0.5	N/A (b)	0.8	1.8	1.8	5.4	4.7
07/16/97	1.0 (b)	1.2	0.9	N/A (b)	0.9	1.8	2.0	7.8	7.7
07/17/97	1.5	1.2	0.9	0.8 (b)	0.9	2.1	2.0	10.8	10.8
07/18/97	1.7	1.2	1.0	1.2	1.0	1.6	2.1	7.6	10.9
07/19/97	1.3	0.9	0.7	0.9	0.9	1.5	1.9	5.0	5.2
07/20/97	1.1	0.7	0.5	0.8	0.7	1.2	3.0	2.1	2.8
07/21/97	1.8	1.2	1.0	1.3	1.0	1.8	2.3	8.0	10.3
07/22/97	1.3	0.9	0.7	1.0	1.0	1.6	2.8	2.4	3.2
07/23/97	1.0	0.7	0.6	0.7	0.8	1.4	3.4	1.1	1.3
07/24/97	1.3	0.9	0.7	1.0	0.9	1.5	1.7	5.4	6.4
07/25/97	1.6	1.0	0.8	1.1	0.9	2.0	2.3	8.7	9.5
07/26/97	1.7	1.2	1.0	1.2	0.9	1.6	2.1	11.8	15.2
07/27/97	1.3	0.8	0.6	0.9	1.0	1.9	1.8	4.8	4.2
07/28/97	1.2	0.8	0.6	0.8	0.8	2.5	2.2	4.7	5.3
07/29/97	1.1	0.7	0.5	0.8	0.8	1.2	1.8	1.9	2.3
07/30/97	0.9	0.5	0.4	0.7	0.8	1.0	2.6	0.8	0.9
07/31/97	1.5	0.9	0.6	1.2	0.9	1.5	3.1	2.1	4.3

Monthly Statistics

	AMS 5	AMS 6	PILOT	AMS11	BKGD 2	K65.NW	K65.SW	K65.NE	K65.SE
Average:	1.2	0.9	0.7	0.9	0.8	1.7	2.2	5.8	6.8
Maximum:	2.8	1.2	1.0	1.3	1.0	3.5	3.8	12.2	17.5
Minimum:	0.7	0.5	0.4	0.4	0.6	0.9	0.8	0.8	0.9
Median:	1.2	0.9	0.7	0.8	0.8	1.8	2.1	5.4	5.2
Std. Dev:	0.4	0.2	0.2	0.2	0.1	0.5	0.8	3.3	4.8

STANDARD LEGEND:
1. "(a)" indicates edited data due to erroneous readings from the monitoring equipment.
2. "(b)" indicates partial or complete data loss due to monitor malfunction.
3. "(c)" indicates partial or complete data loss due to programming error in monitor.
4. All values reported in pCi/L are non instrument background corrected.

CONSOLIDATED CONSENT AGREEMENT / FEDERAL FACILITY COMPLIANCE AGREEMENT/ FEDERAL FACILITY AGREEMENT MONTHLY PROGRESS REPORT

MONTH: AUGUST
YEAR: 1997

FACILITY: Fernald Environmental Management Project
U.S. Department of Energy
7400 Willey Road, P.O. Box 538704
Cincinnati, Ohio 45253 Hamilton

K-65 SILO REPORT
RADON CONCENTRATIONS

Summary of Continuous Monitoring Results — Report Date: 10/08/97

Daily Statistics	SILO 1				SILO 2			
	Average	Maximum	Minimum	Std. Dev.	Average	Maximum	Minimum	Std. Dev.
08/01/97	9.29E+06	9.98E+06	8.27E+06	5.01E+05	8.33E+06	8.85E+06	7.54E+06	3.69E+05
08/02/97	9.61E+06	1.02E+07	9.11E+06	2.98E+05	8.48E+06	8.97E+06	8.09E+06	2.58E+05
08/03/97	9.34E+06	9.96E+06	8.71E+06	4.53E+05	8.26E+06	8.72E+06	7.73E+06	3.29E+05
08/04/97	9.54E+06	1.00E+07	8.94E+06	3.43E+05	8.38E+06	8.76E+06	7.86E+06	2.90E+05
08/05/97	9.61E+06	1.01E+07	2.17E+06	6.42E+05	8.28E+06	8.76E+06	1.73E+06	6.05E+05
08/06/97	9.70E+06	1.04E+07	8.86E+06	4.23E+05	8.41E+06	8.99E+06	7.61E+06	3.10E+05
08/07/97	9.71E+06	1.02E+07	8.45E+06	4.15E+05	5.53E+06	8.86E+06	1.62E+06	3.29E+06
08/08/97	9.80E+06	1.05E+07	8.79E+06	4.87E+05	4.66E+06	8.67E+06	1.49E+06	3.25E+06
08/09/97	9.85E+06	1.01E+07	9.48E+06	1.88E+05	8.59E+06	8.82E+06	8.15E+06	1.81E+05
08/10/97	9.87E+06	1.00E+07	9.63E+06	1.26E+05	8.58E+06	8.80E+06	8.14E+06	1.31E+05
08/11/97	9.48E+06	9.93E+06	6.65E+03	6.76E+05	8.22E+06	8.56E+06	-1.15E+05	5.69E+05
08/12/97	9.75E+06	1.02E+07	9.10E+06	2.80E+05	8.27E+06	8.51E+06	6.97E+06	2.29E+05
08/13/97	9.82E+06	1.01E+07	9.33E+06	1.70E+05	8.34E+06	8.57E+06	7.92E+06	1.38E+05
08/14/97	9.67E+06	1.01E+07	5.79E+06	4.66E+05	8.11E+06	8.45E+06	4.65E+06	3.69E+05
08/15/97	9.92E+06	1.02E+07	9.47E+06	2.13E+05	8.18E+06	8.40E+06	7.83E+06	1.73E+05
08/16/97	9.62E+06	9.99E+06	9.23E+06	2.74E+05	7.84E+06	8.14E+06	7.45E+06	2.23E+05
08/17/97	9.92E+06	1.02E+07	9.58E+06	1.65E+05	8.15E+06	8.37E+06	7.34E+06	1.55E+05
08/18/97	9.79E+06	1.01E+07	8.83E+06	3.13E+05	8.01E+06	8.35E+06	7.31E+06	2.38E+05
08/19/97	9.88E+06	1.01E+07	2.14E+06	5.07E+05	8.06E+06	8.26E+06	3.91E+06	2.82E+05
08/20/97	1.01E+07	1.04E+07	9.51E+06	1.54E+05	8.20E+06	8.46E+06	7.68E+06	1.48E+05
08/21/97	9.90E+06	1.02E+07	4.37E+06	4.34E+05	8.06E+06	8.38E+06	3.53E+06	3.69E+05
08/22/97	9.89E+06	1.04E+07	9.05E+06	3.21E+05	8.06E+06	8.41E+06	7.31E+06	2.27E+05
08/23/97	9.72E+06	1.03E+07	9.12E+06	4.57E+05	8.02E+06	8.42E+06	7.61E+06	2.63E+05
08/24/97	9.81E+06	1.02E+07	9.41E+06	2.65E+05	8.01E+06	8.34E+06	7.43E+06	2.42E+05
08/25/97	9.45E+06	9.97E+06	1.14E+05	9.03E+05	7.83E+06	8.33E+06	4.98E+06	3.11E+05
08/26/97	9.58E+06	9.99E+06	8.83E+06	3.75E+05	7.82E+06	8.16E+06	7.14E+06	2.72E+05
08/27/97	9.57E+06	1.00E+07	8.83E+06	3.70E+05	7.82E+06	8.14E+06	7.19E+06	2.59E+05
08/28/97	9.64E+06	1.01E+07	8.91E+06	3.81E+05	7.81E+06	8.14E+06	7.26E+06	2.41E+05
08/29/97	9.89E+06	1.03E+07	9.09E+06	3.45E+05	7.95E+06	8.27E+06	7.37E+06	2.16E+05
08/30/97	9.85E+06	1.04E+07	9.19E+06	4.48E+05	7.93E+06	8.31E+06	7.51E+06	2.75E+05
08/31/97	9.70E+06	1.03E+07	8.97E+06	4.58E+05	7.80E+06	8.21E+06	7.35E+06	2.82E+05

Headspace Grab Sample Results

Date:	SILO 1	SILO 2
08/05/97	1.14E+07	8.47E+06
08/07/97	1.17E+07	1.87E+06
08/11/97	1.24E+07	7.93E+06
08/14/97	1.22E+07	8.12E+06
08/19/97	1.17E+07	8.61E+06
08/21/97	1.21E+07	8.07E+06
08/25/97	1.22E+07	7.38E+06
08/28/97	1.20E+07	7.63E+06

NOTES: Negative values may occur when input values from the DAQ system are low, due to regression parameters used in determining concentrations. The low value phenomenon is caused by problems associated with the DAQ system (i.e. power surges, equipment failure, grab sampling, etc.).

STANDARD LEGEND:

1. All values reported in pCi/L.
2. Data reported to three significant digits to remain consistent with the calibration data.
3. Shaded Cells indicate partial/complete data loss due to equipment malfunction.

CONSOLIDATED CONSENT AGREEMENT / FEDERAL FACILITY COMPLIANCE AGREEMENT/ FEDERAL FACILITY AGREEMENT MONTHLY PROGRESS REPORT

MONTH: AUGUST
YEAR: 1997

FACILITY: Fernald Environmental Management Project
U.S. Department of Energy
7400 Willey Road, P.O. Box 538704
Cincinnati, Ohio 45253 Hamilton

SELECTED ENVIRONMENTAL MONITORING RADON CONCENTRATIONS REPORT

Report Generated:
10/08/97

Daily Averages	AMS 5	AMS 6	PILOT PLANT WAREHOUSE	AMS 11 Background 1	BKGD 2 Miamitown	K65.NW	K65.SW	K65.NE	K65.SE
	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)
08/01/97	1.9	1.2	1.1	1.4	1.0	2.0	2.1	8.4	15.4
08/02/97	2.0	1.2	1.1	1.5	1.0	1.9	2.4	11.0	22.5
08/03/97	2.0	1.2	1.0	1.5	1.1	1.9	2.5	11.2	12.1
08/04/97	1.8	1.3	1.0	1.4	0.9	2.0	3.4	8.8	10.0
08/05/97	1.2	0.7	0.8	0.8	0.8	1.3	1.3	1.5	2.0
08/06/97	1.8	0.9	0.7	1.1	0.9	1.4	1.9	2.4	6.7
08/07/97	2.0	1.2	1.1	1.5	1.0	1.9	3.3	3.2	8.5
08/08/97	2.0	1.2	1.1	1.8	0.9	1.8	2.3	8.8	12.0
08/09/97	1.3	0.9	0.7	0.9	0.8	1.4	1.8	5.8	8.0
08/10/97	0.9	0.8	0.5	0.7	0.7	1.2	0.8	1.4	1.3
08/11/97	1.8	1.2	0.8	1.2	1.0	3.3	2.4	5.5	3.8
08/12/97	1.4	0.7	0.5	0.8	0.8	1.2	2.8	1.8	1.3
08/13/97	0.8	0.5	0.4	0.8	0.8	0.8	0.9	1.9	1.7
08/14/97	1.0	0.7	0.5	0.8	0.8	1.5	1.3	1.3	2.1
08/15/97	1.0	0.5	0.5	0.8	0.7	3.5	1.3	1.5	1.1
08/16/97	0.8	0.5	0.4	0.5	0.8	0.7	0.8	1.2	0.8
08/17/97	0.8	0.5	0.4	0.8	0.8	2.0	1.7	2.7	2.5
08/18/97	0.7	0.5	0.4	0.7	0.5	0.8	0.8	2.9	2.2
08/19/97	0.8	0.8	0.5	0.8	0.5	2.0	1.3	1.4	1.4
08/20/97	0.8	0.8	0.5	0.7	0.5	1.4	4.2	1.5	2.7
08/21/97	0.8	0.5	0.5	0.8	0.5	0.8	0.8	2.1	2.0
08/22/97	0.8	0.8	0.4	0.7	0.5	1.1	0.9	3.3	3.0
08/23/97	0.9	0.8	0.8	1.1	0.8	1.2	1.4	4.0	4.1
08/24/97	1.0	0.9	0.7	1.1	0.7	1.5	1.4	8.7	13.2
08/25/97	0.9	0.8	0.7	1.0	0.7	1.5	1.7	5.8	8.7
08/26/97	1.1	0.9	0.8	1.1	0.8	1.1	2.7	7.8	10.4
08/27/97	1.2	1.2	0.9	1.3	0.9	1.8	2.3	7.1	12.2
08/28/97	1.4	1.2	0.9	1.6	0.9	2.4	3.4	6.8	8.5
08/29/97	0.9	0.8	0.6	1.1	0.7	1.8	2.1	1.8	4.7
08/30/97	1.1	1.0	0.8	1.3	0.8	2.8	2.2	7.7	11.8
08/31/97	1.3	1.1	1.0	1.3	0.8	1.8	1.8	7.8	10.1

Monthly Statistics

	AMS 5	AMS 6	PILOT	AMS 11	BKGD 2	K65.NW	K65.SW	K65.NE	K65.SE
AVERAGE:	1.2	0.9	0.7	1.0	0.8	1.7	1.9	4.8	8.5
MAXIMUM:	2.0	1.3	1.1	1.8	1.1	3.5	4.2	11.2	22.5
MINIMUM:	0.8	0.5	0.4	0.5	0.5	0.7	0.8	1.2	0.8
MEDIAN:	1.1	0.8	0.7	1.0	0.8	1.5	1.8	3.2	4.4
STD. DEV:	0.4	0.3	0.2	0.3	0.2	0.7	0.8	3.1	5.3

STANDARD LEGEND:
1. "(a)" indicates edited data due to erroneous readings from the monitoring equipment.
2. "(b)" indicates partial or complete data loss due to monitor malfunction.
3. "(c)" indicates partial or complete data loss due to programming error in monitor.
4. All values reported in pCi/L are non instrument background corrected.

CONSOLIDATED CONSENT AGREEMENT / FEDERAL FACILITY COMPLIANCE AGREEMENT/ FEDERAL FACILITY AGREEMENT MONTHLY PROGRESS REPORT

MONTH: SEPTEMBER
YEAR: 1997

FACILITY: Fernald Environmental Management Project
U.S. Department of Energy
7400 Willey Road, P.O. Box 538704
Cincinnati, Ohio 45253 Hamilton

K-65 SILO REPORT
RADON CONCENTRATIONS

Summary of Continuous Monitoring Results — Report Date: 10/08/97

Daily Statistics	SILO 1				SILO 2			
	Average	Maximum	Minimum	Std. Dev.	Average	Maximum	Minimum	Std. Dev.
09/01/97	9.49E+06	1.01E+07	8.82E+06	4.78E+05	7.70E+06	8.08E+06	7.23E+06	2.96E+05
09/02/97	9.51E+06	1.01E+07	-2.25E+04	8.56E+05	7.73E+06	8.13E+06	-1.16E+05	6.54E+05
09/03/97	1.00E+07	1.03E+07	9.60E+06	1.65E+05	7.71E+06	8.15E+06	7.13E+06	2.41E+05
09/04/97	9.91E+06	1.05E+07	-5.18E+03	1.15E+06	7.37E+06	8.36E+06	-1.15E+05	1.07E+06
09/05/97	1.01E+07	1.05E+07	9.25E+06	3.17E+05	6.97E+06	7.33E+06	6.41E+06	2.23E+05
09/06/97	1.02E+07	1.06E+07	9.76E+06	3.01E+05	6.90E+06	7.21E+06	6.53E+06	2.04E+05
09/07/97	9.96E+06	1.04E+07	9.32E+06	3.81E+05	6.72E+06	7.04E+06	5.95E+06	2.53E+05
09/08/97	9.89E+06	1.02E+07	9.29E+06	3.01E+05	6.72E+06	6.93E+06	6.38E+06	1.63E+05
09/09/97	9.97E+06	1.03E+07	1.02E+04	1.03E+06	6.74E+06	6.92E+06	-1.15E+05	7.08E+05
09/10/97	1.01E+07	1.04E+07	9.48E+06	1.94E+05	6.79E+06	6.95E+06	6.32E+06	1.28E+05
09/11/97	9.92E+06	1.03E+07	1.37E+04	8.70E+05	6.64E+06	6.91E+06	-1.14E+05	5.89E+05
09/12/97	9.54E+06	1.03E+07	8.92E+06	3.12E+05	6.49E+06	6.79E+06	6.09E+06	1.48E+05
09/13/97	9.83E+06	1.04E+07	9.10E+06	4.97E+05	6.63E+06	6.94E+06	6.27E+06	2.28E+05
09/14/97	9.74E+06	1.02E+07	9.08E+06	4.31E+05	6.57E+06	6.86E+06	6.22E+06	2.16E+05
09/15/97	9.69E+06	1.01E+07	6.78E+06	4.62E+05	6.53E+06	6.79E+06	4.63E+06	2.44E+05
09/16/97	9.73E+06	1.02E+07	9.00E+06	4.06E+05	6.51E+06	6.78E+06	6.08E+06	2.07E+05
09/17/97	9.99E+06	1.03E+07	1.32E+06	5.42E+05	6.48E+06	6.74E+06	7.72E+05	3.76E+05
09/18/97	9.84E+06	1.05E+07	8.95E+06	5.14E+05	6.48E+06	6.83E+06	5.91E+06	2.33E+05
09/19/97	9.91E+06	1.05E+07	9.18E+06	4.13E+05	6.44E+06	6.84E+06	5.88E+06	2.68E+05
09/20/97	1.00E+07	1.02E+07	9.79E+06	1.05E+05	6.35E+06	6.53E+06	6.01E+06	1.14E+05
09/21/97	9.97E+06	1.03E+07	9.53E+06	2.84E+05	6.38E+06	6.66E+06	5.90E+06	1.88E+05
09/22/97	1.01E+07	1.06E+07	9.48E+06	3.52E+05	6.49E+06	6.80E+06	6.07E+06	1.85E+05
09/23/97	1.00E+07	1.05E+07	1.55E+05	1.66E+06	6.29E+06	6.94E+06	-2.55E+04	1.08E+06
09/24/97	1.04E+07	1.09E+07	9.92E+06	2.07E+05	6.40E+06	6.66E+06	6.08E+06	1.38E+05
09/25/97	1.06E+07	1.12E+07	9.63E+06	4.54E+05	6.55E+06	6.81E+06	6.14E+06	1.60E+05
09/26/97	1.05E+07	1.11E+07	9.52E+06	4.79E+05	6.47E+06	6.77E+06	5.88E+06	1.96E+05
09/27/97	1.05E+07	1.10E+07	9.78E+06	4.17E+05	6.47E+06	6.74E+06	6.17E+06	1.75E+05
09/28/97	1.06E+07	1.10E+07	9.92E+06	4.04E+05	6.39E+06	6.71E+06	5.03E+06	2.52E+05
09/29/97	1.06E+07	1.11E+07	9.92E+06	4.31E+05	6.39E+06	6.70E+06	5.03E+06	2.31E+05
09/30/97	1.06E+07	1.10E+07	1.01E+07	2.59E+05	6.79E+06	7.65E+06	5.65E+06	5.77E+05

Headspace Grab Sample Results

Date:	SILO 1	SILO 2
09/02/97	1.13E+07	8.05E+06
09/04/97	1.19E+07	6.93E+06
09/09/97	1.29E+07	6.28E+06
09/11/97	1.22E+07	6.23E+06
09/15/97	1.12E+07	6.71E+06
09/17/97	1.20E+07	6.32E+06
09/23/97	1.21E+07	6.55E+06
09/25/97	1.29E+07	6.15E+06
09/29/97	1.33E+07	5.38E+06

NOTES: Negative values may occur when input values from the DAQ system are low, due to regression parameters used in determining concentrations. The low value phenomenon is caused by problems associated with the DAQ system (i.e. power surges, equipment failure, grab sampling, etc.).

STANDARD LEGEND:

1. All values reported in pCi/L.
2. Data reported to three significant digits to remain consistent with the calibration data.
3. Shaded Cells indicate partial/complete data loss due to equipment malfunction.

CONSOLIDATED CONSENT AGREEMENT / FEDERAL FACILITY COMPLIANCE AGREEMENT/ FEDERAL FACILITY AGREEMENT MONTHLY PROGRESS REPORT

MONTH: SEPTEMBER
YEAR: 1997

FACILITY: Fernald Environmental Management Project
U.S. Department of Energy
7400 Willey Road, P.O. Box 538704
Cincinnati, Ohio 45253 Hamilton

SELECTED ENVIRONMENTAL MONITORING RADON CONCENTRATIONS REPORT

Report Generated:
10/08/97

Daily Averages	AMS 5	AMS 6	PILOT PLANT WAREHOUSE	AMS 11 Background 1	BKGD 2 Miamitown	K65,NW		K65,SW		K65,NE		K65,SE	
	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)	(pCi/L)		(pCi/L)		(pCi/L)		(pCi/L)	
09/01/97	1.5	1.2	0.9	1.8	1.0	1.8		2.4		5.9		8.5	
09/02/97	1.5	1.2	1.0	1.5	0.9	2.0	(b)	1.7		4.9		8.5	
09/03/97	0.8	0.8	0.5	0.8	0.5	N/A	(b)	1.2		1.4		1.8	
09/04/97	1.0	0.9	0.8	1.2	0.7	N/A	(b)	2.0		5.4		10.9	
09/05/97	1.5	1.2	1.0	1.8	0.9	1.4	(b)	2.3		11.7		17.7	
09/06/97	1.8	1.3	1.1	1.7	0.9	2.0	(a)	2.1		13.1		14.1	
09/07/97	1.4	1.2	1.0	1.5	0.8	2.0		2.2		8.7		14.4	
09/08/97	1.4	1.1	0.8	1.3	0.9	2.2	(b)	4.7		8.5		8.5	
09/09/97	0.8	0.7	0.5	0.8	0.6	N/A	(b)	2.7		2.5		4.3	
09/10/97	0.8	0.8	0.5	0.7	0.5	0.9	(b)	1.0		3.0		2.7	
09/11/97	0.7	0.6	0.5	0.7	0.5	1.3		0.9		1.7		2.8	
09/12/97	1.4	1.3	1.0	1.4	0.8	2.1		2.1		5.8		7.6	
09/13/97	1.8	1.3	1.1	1.5	0.9	2.3		2.4		8.2		14.2	
09/14/97	1.8	1.3	1.0	1.5	0.9	2.4		2.2		9.7		13.7	
09/15/97	1.5	1.3	1.0	1.5	0.9	3.2		2.8		9.8		13.1	
09/16/97	1.6	1.2	1.1	1.6	1.0	3.8		3.8		7.5		12.3	
09/17/97	1.3	1.1	0.9	1.1	0.8	2.3		3.8		10.3		13.8	
09/18/97	1.9	1.3	1.2	1.8	0.9	3.0		2.9		10.1		13.1	
09/19/97	1.8	1.3	1.3	1.8	1.0	2.3		2.3		10.2		20.4	
09/20/97	0.8	0.8	0.5	0.8	0.8	1.4		1.2		3.0		2.4	
09/21/97	1.1	0.8	0.7	1.3	0.7	1.7		2.7		4.0		6.8	
09/22/97	1.8	1.3	1.3	1.8	0.9	3.8		4.8		11.2		39.3	
09/23/97	1.8	1.3	1.0	1.5	1.0	3.8		5.4		9.8		14.1	
09/24/97	1.2	1.0	0.8	1.2	0.8	2.8		6.2		7.9		19.8	(b)
09/25/97	1.8	1.4	1.4	2.0	1.0	2.5		2.8		18.5		5.9	(b)
09/26/97	1.8	1.2	1.0	2.1	1.0	2.9		2.9		4.2		4.8	
09/27/97	1.9	1.3	1.1	2.1	1.0	5.8		5.7		11.1		15.5	
09/28/97	2.2	1.8	1.8	2.2	1.1	3.1		3.9		14.1		25.9	
09/29/97	0.7	0.8	0.5	0.8	0.8	2.2		1.8		3.9		1.9	
09/30/97	0.7	0.5	0.5	0.9	0.5	1.2		0.9		2.0		2.3	

Monthly Statistics

	AMS 5	AMS 6	PILOT	AMS 11	BKGD 2	K65,NW	K65,SW	K65,NE	K65,SE
AVERAGE:	1.4	1.1	0.9	1.4	0.8	2.4	2.8	7.4	11.2
MAXIMUM:	2.2	1.8	1.8	2.2	1.1	5.8	6.2	18.5	39.3
MINIMUM:	0.8	0.5	0.5	0.7	0.5	0.9	0.9	1.4	1.8
MEDIAN:	1.5	1.2	1.0	1.5	0.9	2.2	2.4	7.0	11.8
STD. DEV:	0.4	0.3	0.3	0.4	0.2	1.0	1.4	3.9	8.1

STANDARD LEGEND:
1. "(a)" indicates edited data due to erroneous readings from the monitoring equipment.
2. "(b)" indicates partial or complete data loss due to monitor malfunction.
3. "(c)" indicates partial or complete data loss due to programming error in monitor.
4. All values reported in pCi/L are non instrument background corrected.

ATTACHMENT C

REMOVAL ACTION STATUS REPORT

Note: All Removal Action except 3, 9, 12, 17, and 27 are completed and closed. Removal Action 3, 9, 12, 17, and 27 are Programmatic Removal Actions and work continues under them. All documentation for work done this quarter under these Progammatic Removal Actions is located in the Post-Rod files. Gradually work performed under these actions is being phased out and being done pursuant to appropriate Remedial Actions.

REMOVAL ACTION NAME	#	STATUS	CLOSURE DATE	SCOPE
Extraction of Water Under FEMP Buildings AKA: Plant 6 Contaminated Perched Water	1	Closed	September 13, 1995	Pump water from extraction wells underneath Plants 2/3, 6, 8, and 9. Treat extracted water for volatile organic chemicals and uranium removal before discharge
Waste Pit Area Runoff Control	2	Closed	July 2, 1992	Collect and treat contaminated storm water run-off from the waste pit area
South Plume	3	Closed, transferred to Post-ROD	May 22, 1997	Collect and treat contaminated storm water from waste pit area, Install new alternate water supply, pump an discharge groundwater from South Plume, Install and operate interim Advanced Waste Water Treatment System, Conduct groundwater monitoring and institutional controls, conduct groundwater modeling and geochemical investigation
Silo 1 and 2	4	Closed	May 17, 1994	Install bentonite cap to reduce and monitor radon emissions, provide follow-on monitoring
K-65 Decant Sump Tank	5	Closed	March 5, 1993	Periodically remove liquid from K-65 decant sump tank
Waste Pit 6 - Exposed Material	6	Closed	March 25, 1992	Eliminate potential airborne contamination by resubmerging exposed pit material
Plant One Pad Continuing Release	7	Closed	February 16, 1995	Implement run-on/off control, install new pad, and upgrade existing Plant 1 Storage Pad
Inactive Flyash Piles/ South Field Area	8	Closed	December 23, 1991	Install plastic chain link barrier and post warning signs
Removal of Waste Inventory	9	Closed - Transferred to Post-ROD	May 22, 1997	Disposition of low-level waste off-site
Active Flyash Pile Controls	10	Closed	May 16, 1997	Complete interim surface stabilization and complete active Flyash pile controls
Pit 5 Experimental Treatment Facility (ETS)	11	Closed	April 22, 1992	Remove contents, structure, and filter material. Backfill and cap with clay cover
Safe Shutdown	12	Closed - Transferred to Post-ROD	May 22, 1997	Remove uranium and other material from former processing equipment and ship material and equipment off-site
Plant 1 Ore Silos	13	Closed	November 6, 1995	Dismantle fourteen ore silos and their support structures
Contaminated Soils Adjacent to Solid Waste Incinerator at the Sewage Treatment Plant	14	Closed	January 3, 1995	Isolate or remove and dispose of contaminated soils from the vicinity of the sewage treatment plant
Scrap Metals Pile	15	Closed	November 14, 1994	Disposition If LLW Ferrous/non-ferrous scrap metal, Containerize and dispose of scrap copper
Collect Uncontrolled Production Area Runoff Northeast	16	Closed	May 22, 1997	Collect storm water run-off rom the northeast perimeter of the former production area in the Storm Water Retention Basin
Improved Storage of Soil and Debris	17	Closed - Transferred to Post-ROD	May 22, 1997	Improve storage of existing and future generated soils and debris
Control Exposed Material in Pit 5	18	Closed	May 13, 1993	Eliminate potential airborne contamination by re-submerging exposed pit material
Plant 7 Dismantling	19	Closed	August 18, 1995	Dismantle and dispose of the Plant 7 structure
Uranyl Nitrate Neutralization Project	20	Closed	January 16, 1997	Neutralize, filter and package UNH inventory
Silo 3	21	Closed	February 24, 1993	Mitigate the potential release of hazardous waste material by covering and sealing dust collector hopper, removing dust collector, and capping and covering obvious release pathways
Waste Pit Area Containment Improvement	22	Closed	August 1, 1993	Stabilize south barrier of Pit 4; regarding drainage ditches along Pits 3, 4, 5, and 6: and resurface road between Pits 3, 4, 5, and 6

REMOVAL ACTION NAME	#	STATUS	CLOSURE DATE	SCOPE
ictive Flyash Pile	23	Closed	June 29, 1992	Conduct field investigation to identify locations requiring material removal
ot Plant Sump	24	Closed	January 14, 1994	Remove liquid and sludge from the sump
ric Acid Rail Car	25	Closed	November 12, 1993	Remove residual contents from tank car and decontaminate and dispose of tank car
bestos Removal	26	Closed - Transferred to Post-ROD	May 22, 1997	Mitigate the potential for contaminant and migration of asbestos fibers
anagement of Contaminated Structures	27	Closed - Transferred to Post-ROD	May 22, 1997	Management of contaminated structures
e Training Facility	28	Closed	July 11, 1995	Remove, decontaminate, dispose, treat or store contaminated structures, equipment, and soil from the former Fire Training Facility
sion Control of Inactive Flyash Pile; AKA: mporary Nitrate Storage Tanks	29	Closed	March 2, 1994	Mitigate the threat of erosion induced slope failure and discharge of flyash to Paddy's Run
2 Warehouse Well	30	Closed	May 28, 1997	Minimize future groundwater contamination by intercepting contaminated seeps that drain from the South Field and Inactive Flyash Pile and infiltrate to the GMA
uth Field and Inactive Flyash Piles Seepage ntrol Project	31	Closed	December 6, 1995	

REMOVAL ACTION NAME	#	STATUS	CLOSURE DATE	SCOPE
Extraction of Water Under FEMP Buildings AKA: Plant 6 Contaminated-Perched Water	1	Closed	September 13, 1995	Pump water from extraction wells underneath Plants 2/3, 6, 8, and 9. Treat extracted water for volatile organic chemicals and uranium removal before discharge
Waste Pit Area Runoff Control	2	Closed	July 2, 1992	Collect and treat contaminated storm water run off from the waste pit area
South Plume	3	Closed, transferred to Post-ROD	May 22, 1997	Collect and treat contaminated storm water from waste pit area, Install new alternate water supply, pump an discharge groundwater from South Plume, Install and operate interim Advanced Waste Water Treatment System, Conduct groundwater monitoring and institutional controls, conduct groundwater modeling and geochemical investigation
Silo 1 and 2	4	Closed	May 17, 1994	Install bentonite cap to reduce and monitor radon emissions, provide follow-on monitoring
K 65 Decant Sump Tank	5	Closed	March 5, 1993	Periodically remove liquid from K-65 decant sump tank
Waste Pit 6 Exposed Material	6	Closed	March 25, 1992	Eliminate potential airborne contamination by resubmerging exposed pit material
Plant One Pad Continuing Release	7	Closed	February 16, 1995	Implement run-on/off control, install new pad, and upgrade existing Plant 1 Storage Pad
Inactive Flyash Piles/ South Field Area	8	Closed	December 23, 1991	Install plastic chain link barrier and post warning signs
Removal of Waste Inventory	9	Closed - Transferred to Post-ROD	May 22, 1997	Disposition of low-level waste off-site
Active Flyash Pile Controls	10	Closed	May 16, 1997	Complete interim surface stabilization and complete active Flyash pile controls
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Safe Shutdown	12	Closed - Transferred to Post-ROD	May 22, 1997	Remove uranium and other material from former processing equipment and ship material and equipment off-site
Plant 1 Ore Silos	13	Closed	November 6, 1995	Dismantle fourteen ore silos and their support structures
Contaminated Soils Adjacent to Solid Waste Incinerator at the Sewage Treatment Plant	14	Closed	January 3, 1995	Isolate or remove and dispose of contaminated soils from the vicinity of the sewage treatment plant
Scrap Metals Pile	15	Closed	November 14, 1994	Disposition If LLW Ferrous/non-ferrous scrap metal, Containerize and dispose of scrap copper
Collect Uncontrolled Production Area Runoff Northeast	16	Closed	May 22, 1997	Collect storm water run-off rom the northeast perimeter of the former production area in the Storm Water Retention Basin
Improved Storage of Soil and Debris	17	Closed - Transferred to Post-ROD	May 22, 1997	Improve storage of existing and future generated soils and debris
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Silo 3	21	Closed	February 24, 1993	Mitigate the potential release of hazardous waste material by covering and sealing dust collector hopper, removing dust collector, and capping and covering obvious release pathways
Waste Pit Area Containment Improvement	22	Closed	August 1, 1993	Stabilize south barrier of Pit 4; regarding drainage ditches along Pits 3, 4, 5, and 6; and resurface road between Pits 3, 4, 5, and 6

REMOVAL ACTION NAME	#	STATUS	CLOSURE DATE	SCOPE
Inactive Flyash Pile	23	Closed	June 29, 1992	Conduct field investigation to identify locations requiring material removal
Pilot Plant Sump	24	Closed	January 14, 1994	Remove liquid and sludge from the sump
Nitric Acid Rail Car	25	Closed	November 12, 1993	Remove residual contents from tank car and decontaminate and dispose of tank car
Asbestos Removal	26	Closed - Transferred to Post-ROD	May 22, 1997	Mitigate the potential for contaminant and migration of asbestos fibers
Management of Contaminated Structures	27	Closed - Transferred to Post-ROD	May 22, 1997	Management of contaminated structures
Fire Training Facility	28	Closed	July 11, 1995	Remove, decontaminate, dispose, treat or store contaminated structures, equipment, and soil from the former Fire Training Facility
Erosion Control of Inactive Flyash Pile; AKA: Temporary Nitrate Storage Tanks	29	Closed	March 2, 1994	Mitigate the threat of erosion induced slope failure and discharge of flyash to Paddy's Run
KC2 Warehouse Well	30	Closed	May 28, 1997	Minimize future groundwater contamination by intercepting contaminated seeps that drain from the South Field and Inactive Flyash Pile and infiltrate to the GMA
South Field and Inactive Flyash Piles Seepage Control Project	31	Closed	December 6, 1995	